

REMARKS

Claims 1-19 and 21-23 are pending in this application. Claims 1, 14, 16, 18 and 21 are the independent claims. By this Amendment, claim 20 is cancelled and claims 1, 2, 8, 10, 11, 14-16, 18 and 21 are amended. No new matter is added.

Allowable Subject Matter

Claims 10-12 are indicated as being allowable if rewritten in independent form to include the features of their base claim and any intervening claims. As independent claim 1 is amended to include the subject matter of allowable claim 10, claims 1-9 and 11-13 are in condition for allowance. The remaining pending claims are in condition for allowance for the reasons discussed below.

Rejections under 35 U.S.C. §103

Claims 1, 2, 4, 5, 8, 9, 14-17 and 21 stand rejected under 35 U.S.C. §103(a) as being unpatentable over U.S. Patent Application Publication 2004/0030513 to Kocaman et al. (Kocaman) in view of US Patent Application Publication 2004/0096013 to Laturell et al. (Laturell). Applicants respectfully traverse this rejection for the reasons detailed below.

Independent claims 1 and 14 are amended to recite the allowable subject matter of claim 10. Therefore, the combination of references fails to render claims 1, 2, 4, 5, 8, 9, 14 and 15 obvious.

Regarding claims 16-17, it is alleged in the Office Action that the four XOR gates in Fig. 5 of Kocaman combine latched signals received from the four data latches. However, neither Kocaman nor Laturell, whether considered alone or in combination, disclose or suggest four XOR gates receiving latched signals, each of the XOR gates receiving a latched signal and its

inverted counterpart corresponding to input data latched according to one of quadrature clock signals, respectively, each XOR gate generating an intermediate signal. Thus, claims 16 and 17 are not rendered obvious by the combination of references.

Regarding independent claim 21, the combination of references fails to disclose or suggest receiving the latched signals at a second set of latches at different times according to the quadrature clock signals to produce a retimed version of the received data; and outputting a reference signal based on the latched signals, as recited in independent claim 21 as amended.

Because the combination of references fails to disclose or suggest all of the claim features, the combination of references fails to render the rejected claims obvious. Therefore, withdrawal of the rejection is respectfully requested.

Claims 3, 6, 7, 13, 22 and 23 stand rejected under 35 U.S.C. §103(a) as being unpatentable over Kocaman in view of Laturell and further in view of U.S. Patent No. 5,506,874 to Izzard. Applicants respectfully traverse this rejection for the reasons detailed below.

Claims 3, 6, 7, 13, 22 and 23 are allowable for their dependency on their respective independent claim for the reasons discussed above, as well as for the additional features recited therein. As such, withdrawal of the rejection is respectfully requested.

Claims 18 and 19 stand rejected under 35 U.S.C. §103(a) as being unpatentable Izzard in view of U.S. Patent No. 6,847,789 to Savoj, et al (Savoj). Applicants respectfully traverse this rejection for the reasons detailed below.

Independent 18 is amended to include the subject matter of claim 1, including the allowable subject matter of claim 10. Therefore, claims 18 and 19 are not rendered obvious by the combination of Izzard and Savoj. For example, the combination of references fails to disclose or

suggest, a clock and data recovery (CDR) circuit, comprising a phase-error generating circuit to determine an error signal output by a quarter-rate phase detector... wherein the quarter-rate phase detector includes a first set of four latches controllable to latch, at different times according to quadrature clock signals, respectively, data received by the quarter-rate phase detector so as to form a first set of latched signals output to the phase-error generating circuit, and a second set of four latches arranged to receive outputs of the first set of latches, respectively, and controllable to latch data at different times according to the quadrature clock signals, respectively, so as to form a second set of latched signals output to determine a reference signal.

Accordingly, Applicants respectfully request that the rejection be withdrawn.

Claim 20 stands rejected under 35 U.S.C. §103(a) as being unpatentable over Izzard in view of Savoj and further in view of Laturell and Kocaman. As claim 20 is cancelled, the rejection is moot.

CONCLUSION

In view of the above remarks and amendments, the Applicants respectfully submit that each of the pending objections and rejections has been addressed and overcome, placing the present application in condition for allowance. A notice to that effect is respectfully requested. If the Examiner believes that personal communication will expedite prosecution of this application, the Examiner is invited to contact the undersigned.

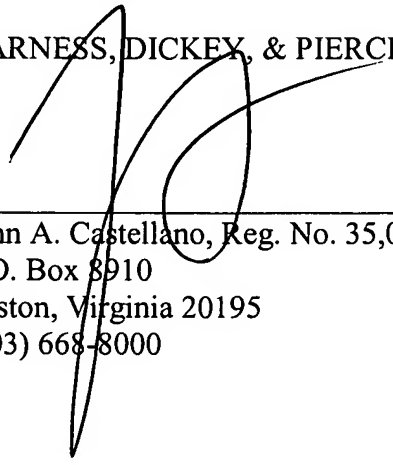
Should there be any outstanding matters that need to be resolved in the present application, the Examiner is respectfully requested to contact John A. Castellano, at the telephone number of the undersigned below.

If necessary, the Commissioner is hereby authorized in this, concurrent, and future replies, to charge payment or credit any overpayment to Deposit Account No. 08-0750 for any additional fees required under 37 C.F.R. § 1.16 or under 37 C.F.R. § 1.17; particularly, extension of time fees.

Respectfully submitted,

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By



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